

Claims

- [c1] A latch assembly for a trailer comprising a door opening partially defined by a bottom wall of the trailer, and which opening is selectively closed by a door moveably mounted to the trailer, the latch assembly comprising:
- a base plate adapted to mount to the door;
 - a handle rotatably mounted to the base plate for rotation between a closed position and an open position, the handle having a locking flange;
 - a hook rotatably mounted to the base plate and operably coupled to the handle for rotation between a locked and an unlocked position as the handle is rotated between the closed and open positions; and
 - a closed keeper having a handle catch portion and moveably mounted to the base plate for movement between a latched position, wherein the handle locking flange is received by the keeper handle catch portion when the handle is in the closed position to maintain the handle in the closed position, and an unlatched position, wherein the handle locking flange is released by the closed keeper handle catch portion, whereby the handle can rotate from the closed position to the open position without interference from the closed keeper;

the closed keeper further having a rotation stop that is adapted to contact a portion of the handle when the closed keeper is in the unlatched position and the handle is moved from the open position to the closed to move the closed keeper into the latched position in the event that the closed keeper is in the open position as the handle moved from the open position to the closed position.

- [c2] The latch assembly according to claim 1 wherein the closed keeper is rotatably mounted to the base plate.
- [c3] The latch assembly according to claim 2 wherein the closed keeper is biased to the latched position.
- [c4] The latch assembly according to claim 3 wherein the closed keeper has an axis of rotation with respect to the base plate that creates a gravitational bias to move the closed keeper to the latched position.
- [c5] The latch assembly according to claim 4 wherein stops are formed between the closed keeper and the base plate, and the stops limit the rotation of the closed keeper between the open and latched positions.
- [c6] The latch assembly according to claim 1 wherein stops are formed between the closed keeper and the base plate, and the stops limit the movement of the closed

keeper between the open and latched positions.

- [c7] The latch assembly according to claim 1 whether the handle further has a retainer flange, and further comprising an open keeper that has a handle catch portion and the open keeper is mounted to the base plate for movement between a retention position, wherein the handle retainer flange is received by the open keeper handle catch portion to retain the handle in the open position, and a release position, wherein the open keeper handle catch portion releases the handle retainer flange, whereby the handle can rotate from the open position to the closed position.
- [c8] The latch assembly according to claim 7, wherein the open keeper is biased to the retention position.
- [c9] The latch assembly according to claim 7, wherein the open keeper is spring biased to the retention position.
- [c10] The latch assembly according to claim 1, wherein the base plate comprises a tab extending laterally therefrom and the closed keeper further comprises a first stop for limiting the movement of the closed keeper to the unlatched position and a second stop for limiting the movement of the closed keeper to the latched position.
- [c11] The latch assembly according to claim 1 wherein the

closed keeper is mounted to the base plate so that there is a gravitational bias of the closed keeper to move from the unlatched to the latched positions and the first and second stops limit the range of the closed keeper to a gravitational bias to the latched position.

- [c12] A latch assembly for a trailer comprising a door opening partially defined by a bottom wall of the trailer, and which opening is selectively closed by a door moveably mounted to the trailer, the latch assembly comprising:
 - a base plate adapted to mount to the door;
 - a handle rotatably mounted to the base plate for rotation between a closed position and an open position, the handle having a locking flange;
 - a hook rotatably mounted to the base plate and operably coupled to the handle for rotation between a locked and an unlocked position as the handle is rotated between the closed and open positions; and
 - a closed keeper having a handle catch portion and moveably mounted to the base plate for movement between a latched position, wherein the handle locking flange is received by the keeper handle catch portion when the handle is in the closed position to maintain the handle in the closed position, and an unlatched position, wherein the handle locking flange is released by the closed keeper handle catch portion, whereby the handle

can rotate from the closed position to the open position without interference from the closed keeper; wherein the base plate comprises a tab extending laterally therefrom and the closed keeper further comprises a first stop for limiting the movement of the closed keeper to the unlatched position and a second stop for limiting the movement of the closed keeper to the latched position.

- [c13] The latch assembly according to claim 12 wherein the closed keeper is mounted to the base plate so that there is a gravitational bias of the closed keeper to move from the unlatched to the latched positions and the first and second stops limit the range of the closed keeper to a gravitational bias to the latched position.